

CLAIMS

What is claimed is:

1. A method of wirelessly communicating information from a bidirectional high speed data cable modem via an Ethernet connection using a first radio transceiver at a first location and communicating with a second radio transceiver at a customer's premises, the method comprising the steps of:

a. attaching a housing containing a bidirectional high speed data modem with a first radio transceiver, a first radio processor card, and a switching power supply to a supporting cable strand, wherein the supporting cable strand simultaneously supports a coaxial cable carrying an RF spectrum signal and an AC power signal;

b. using a splitter to engage the coaxial cable and split the RF spectrum signal from the AC power;

c. transmitting the RF spectrum signal from the splitter into the bidirectional high speed data modem/router and the AC power to the switching power supply;

d. generating a digital Ethernet signal from the bidirectional high speed data modem/router to the first radio processor card;

e. converting the AC power to DC power with the switching power supply and stepping down the voltage with the switching power supply;

f. using power from the switching power supply to run the bidirectional high speed data modem/router, the first radio transceiver, the first radio processor card, and at least one heating or cooling device adapted to heat or cool the contents of the housing;

g. communicating the digital Ethernet signal from the first radio processor card to the first radio transceiver and then to the first antenna;

h. beaming the signal from the first antenna to a second antenna; and

- i. communicating the signal from the second antenna to a second radio transceiver and then to a second radio processor card than then to a client device.
2. The method of claim 1, wherein the bidirectional high speed data modem communicates with a Wide Area network (“WAN”) connection.
- 5 3. The method of claim 1, wherein the bidirectional high speed data modem wirelessly communicates with a Local Area network (“LAN”) connection.
4. The method of claim 1, wherein the bidirectional high speed data modem is a data over cable system interface specification (DOCSIS) modem.
5. The method of claim 4, wherein the DOCSIS modem/router has a functionality consisting
10 of automatic registration, encryption, and automatic assignment of IP addresses.
6. The method of claim 1, wherein the client device comprises a computer, a local area network (LAN), a network hub, a remote terminal unit for monitoring remote equipment, a digital camera, a fax, a phone, an Ethernet switch, a router or combinations thereof.
7. The method of claim 1, wherein the housing is formed of a material comprising molded
15 plastic, a metal, a composite material, weatherproof sealed coated laminate or combinations thereof.
8. The method of claim 7, wherein the housing further comprises a bidirectional high speed data modem disposed in parallel communication with a bidirectional high speed processor card and transceiver.
- 20 9. The method of claim 1, wherein the bidirectional high speed data modem is connected to the strand independent of connection to a utility pole.
10. The method of claim 1, wherein housing further comprises a detector for detecting a first location of the client device.
11. The method of claim 1, wherein the modem is a router.

12. A method of wirelessly communicating information from a bidirectional high speed data cable modem via an Ethernet connection using a first radio transceiver at a first location and communicating to a plurality of electronic devices comprising radio transceivers, the method comprising the steps of:

- 5 a. attaching a housing containing a bidirectional high speed data modem with a first radio transceiver, a first radio processor card, and a switching power supply to a supporting cable strand, wherein the supporting cable strand simultaneously supports a coaxial cable carrying an RF spectrum signal and an AC power signal;
- 10 b. using a splitter to engage the coaxial cable and split the RF spectrum signal from the AC power;
- c. transmitting the RF spectrum signal from the splitter into the bidirectional high speed data modem/router and the AC power to the switching power supply;
- d. generating a digital Ethernet signal from the bidirectional high speed data modem/router to the first radio processor card;
- 15 e. converting the AC power to DC power with the switching power supply and stepping down the voltage with the switching power supply;
- f. using power from the switching power supply to run the bidirectional high speed data modem, the first radio transceiver, the first radio processor card, and at least one heating or cooling device adapted to heat or cool the contents of the housing;
- 20 g. communicating the digital Ethernet signal from the first radio processor card to the first radio transceiver and then to the first antenna; and
- h. beaming the signal from the first antenna to at least one of the plurality of electronic devices comprising the radio transceiver.

13. The method of claim 12, wherein the plurality of electronic devices are electronic devices with a radio transceiver card is installed therein.

14. The method of claim 12, wherein the electronic device is a laptop, PC computer, personal digital assistant (PDA), personal electronic devices communicating with satellites, cell phones, GPS location devices, or other mobile electronic devices that can interface to networks.
- 5 15. The method of claim 13, wherein the radio transceiver card is an card rated an IEEE 802.11b or an 802.11g card.
16. The method of claim 12, wherein the bidirectional high speed data modem communicates with a Wide Area network (“WAN”) connection.
- 10 17. The method of claim 12, wherein the bidirectional high speed data modem/router wirelessly communicates with a Local Area network (“LAN”) connection.
18. The method of claim 12, wherein the bidirectional high speed data modem is a data over cable system interface specification (DOCSIS) modem.
19. The method of claim 12, wherein the DOCSIS modem has a functionality consisting of automatic registration, encryption, and automatic assignment of IP addresses.
- 15 20. The method of claim 12, wherein the housing is formed of a material comprising molded plastic, a metal, a composite material, weatherproof sealed coated laminate, or combinations thereof.
- 20 21. The method of claim 12, wherein the housing further comprises a bidirectional high speed data modem disposed in parallel communication with a bidirectional high speed processor card and transceiver.
22. The method of claim 12, wherein the bidirectional high speed data modem/router is connected to the strand independent of connection to a utility pole.
23. The method of claim 12, wherein housing further comprises a detector for detecting a first location of the client device.
- 25 24. The method of claim 12, wherein the modem can be a router.

25. The method of claim 12, wherein the method creates a public access area known as a “hot spot” from the housing containing modem and other equipment to the plurality of electronic devices for public high speed internet access.

26. The method of claim 25, wherein the method additionally includes authentication techniques to enable access by a user using a defined protocol.

27. The method of claim 26, wherein the defined protocol is a set of email addresses.

28. The method of claim 25, wherein the method further comprises a technique selected from the group consisting of management technique, billing technique, accounting technique, reporting techniques, and combinations thereof, wherein the technique enables additional reports on at least one of the plurality of electronic devices.